Emerald Ash Borer - An Invasive Beetle On Our Borders Recent Prohibitions on the Movement of Firewood Into Rhode island

Since 2012, Emerald Ash borer (EAB) has been found in Connecticut, Massachusetts, New Hampshire and New York. In Rhode Island, RI DEM and URI have been monitoring for EAB for several years and to date, none have been found. The Emerald Ash borer, Agrilus planipennis, is an exotic beetle from Asia discovered near Detroit in the summer of 2002. Since then 24 states have become infested and millions of ash trees (Fraxinus sp.) have died. In the United States, ash trees are the primary trees affected and all 16 native ash species are at risk. In Rhode Island, ash makes up only 2% of our forests, but it's an important landscape and street tree.

EAB life cycle: EAB overwinter as larvae under the bark of ash trees. In the spring, mature larvae pupate and then adult beetles exit ash trees through D-shaped emergence holes. Female beetles lay eggs singly on ash bark and each female can lay 60-90 eggs. Eggs hatch in 7-10 days and tiny larvae bore through the bark and feed on phloem. Larvae continue feeding under the bark for up to two years until they pupate and become adult beetles.

EAB feeding may kill ash trees in only 2 or 3 years. Symptoms may include any or all of the following: dead branches near the top of a tree, leafy shoots sprouting from the trunk, bark splits exposing larval galleries, extensive woodpecker activity, and D-shaped exit holes.

To try and slow down EAB spread, USDA APHIS (Animal and Plant Health Inspection Service) institutes quarantines where EAB has been found. Due to the recent spread of EAB to additional counties, Massachusetts started a statewide quarantine on November 17, 2014 and Connecticut started a statewide quarantine on December 5, 2014. USDA will also be issuing a Federal Quarantine that will mimic both Connecticut and Massachusetts State Quarantines. What does this mean?

The quarantine order means some products can't be moved outside of the quarantined/regulated area. Here's what is quarantined:

- 1. Firewood of all hardwood (non-conifer) species. (Firewood is wood smaller than 48 inches),
- 2. All ash nursery stock,
- 3. All ash lumber that has not been treated. (Proper ash wood treatments include removal of bark and 1/2 inch of wood, dry kiln sterilization, fumigation and heat treatments.)
- 4. All ash green lumber and other ash material living, dead, cut, or fallen, including logs, stumps, roots, branches, and composted and non-composted chips 1/2 inch or more in diameter.

(over)

So, in other words, no ash, living or dead, can be moved out of quarantine areas, unless it has been properly treated. All hardwood firewood cannot be moved. <u>Firewood is wood that is cut into pieces smaller than 4 feet</u>. Logs over 4 feet can be moved out of quarantine, unless it is ash, of course.

It is a little more complicated than this - the rules change a little depending on what time of year it is. During the winter, or non-flight period of the Emerald Ash Borer(October 1 - May 1), unprocessed, regulated materials can leave the quarantine area as long as it is processed by May 2nd. During the flight period (May 2 - September 30), regulated materials must be processed before removing it from the quarantine area. To move any regulated material you must also have a certificate issued by USDA. Ash nursery stock can't live through any treatment, and you can't get a certificate to move ash nursery stock.

Because Massachusetts and Connecticut are under state-wide quarantine, Rhode Island truly is an island. No one can move hardwood firewood (wood less than 4 feet) out of Massachusetts and Connecticut and into Rhode Island, regardless of the time of year - it's illegal. I see this mostly affecting Rhode Island's firewood trade. Firewood businesses are still allowed to move hardwood logs over 48 inches into Rhode Island to be cut into firewood, with the exception of Ash Tree logs. You can see complete regulations at: http://www.aphis.usda.gov/wps/portal/aphis/ourfocus/planthealth/sa_domestic_pests_and_diseases/sa_pests_and_diseases/sa_insects/sa_emerald_ash

Once EAB is found in Rhode Island (no one expects RI to remain EAB-free for long), we intend to release parasitic wasps that attack only EAB. Shortly after EAB was detected in Michigan, USDA APHIS started looking for natural enemies of EAB in China. Their efforts have led to the release of three parasitic wasps - two parasitoids that attack EAB larvae and a third parasitoid that attacks EAB eggs. Since 2007, EAB parasitic wasps have been released in 15 states including Connecticut in 2013, and Massachusetts and New Hampshire in 2014. For more information on EAB biocontrol see:

http://www.aphis.usda.gov/plant_health/plant_pest_info/emerald_ash_b/downloads/eab-biocontrol.pdf

If you have any questions regarding the movement of firewood and/or logs or the quarantine protocol, please contact either Liz Duguay, DEM/Agriculture at 222-2718 x4510, or Paul Ricard, DEM/ Forest Environment at 568-2248 x17.